

WHAT IS CLAIMED IS:

1 1. An internet network based video replay system adapted for enabling a
2 customer to view a video program comprising:

3 a network for providing a plurality of access programs selectively available to
4 enable a customer to view a selected program;

5 wherein the network stores a plurality of video programs for a predetermined
6 period of time to permit customers to view selected programs upon demand.

1 2. The internet network based video replay system according to claim 1,
2 wherein said video programming is live programming of events that is stored for a
3 predetermined period of time to permit a user to time shift viewing of selective
4 programs upon demand.

1 3. The internet network based video replay system according to claim 1, and
2 further including a replay portal for storing a plurality of programs and enabling a
3 customer to selectively retrieve a selected program for viewing.

1 4. The internet network based video replay system according to claim 3,
2 wherein said replay portal stores an individual program for a predetermined period of
3 time for selective viewing by a customer

1 5. The internet network based video replay system according to claim 4,
2 wherein after a predetermined period of time the individual program is recorded over
3 to enable a customer to retrieve one of a revised selection of a plurality of programs.

1 6. The internet network based video replay system according to claim 3,
2 wherein a high capacity backbone is provided to permit the replay portal to receive
3 programs from live sources and from broadcasts for retransmission to customers.

1 7. The internet network based video replay system according to claim 3,
2 wherein a replay portal receives programs from other replay portals for retransmission
3 to customers.

1 8. The internet network based video replay system according to claim 1, and
2 further including a primary hub for distributing programs to a secondary hub and fiber
3 optical connections from the secondary hub to a fiber node for retransmission to
4 individual customer homes.

1 9. The internet network based video replay system according to claim 1,
2 wherein said network includes a data sink for receiving network programs and live
3 programs from a provider, a storage unit for receiving said network programs and live
4 programs from the data sink and a data source for providing downstream viewing of
5 selected programming.

1 10. The internet network based video replay system according to claim 9, and
2 further including a storage manager unit for managing the selection of a particular
3 program by a customer and for addition and removal of data from a store.

1 11. The internet network based video replay system according to claim 10,
2 wherein said storage manager is operative connected to a data sink for receiving data
3 from upstream and writing the data to the store for a particular customer while making
4 the data available for immediate delivery to a customer.

1 12. The internet network based video replay system according to claim 9, and
2 further including a media manager for managing the selection of a particular program

3 by a customer, said media manager including a backend frame format means for
4 determining the encapsulation of media frames in real transport protocol.

1 13. The internet network based video replay system according to claim 1,
2 wherein a customer is enabled to view, still pause, reverse and fast forward the
3 viewing of the video program.

1 14. The internet network based video replay system according to claim 1,
2 wherein the acquiring of the video program is by a unicast real time transport protocol
3 or any other unicast protocol.

1 15. The internet network based video replay system according to claim 1,
2 wherein the acquiring of the video program is by a multicast real time transport
3 protocol or other multicast protocol.

1 16. The internet network based video replay system according to claim 1,
2 wherein the acquiring of the video program is by inter portal communication.

1 17. An internet network based video replay system according to claim 16,
2 wherein the transfer is by a unicast real time transport protocol or any other unicast
3 protocol.

1 18. An internet network based video replay system according to claim 16,
2 wherein the transfer is by a multicast real time transport protocol or any other
3 multicast protocol.

1 19. An internet network based video replay system adapted for enabling a
2 customer to view a video program comprising:

3 a network for providing a plurality of access programs selectively
4 available to enable a customer to view a selected program; and

5 a replay portal for storing a plurality of programs for enabling a
6 customer to selectively retrieve a selected program for viewing;

7 wherein the replay portal stores a plurality of video programs for a
8 predetermined period of time to permit customers to view, still pause, reverse
9 and fast forward the viewing of selective programs upon demand.

1 20. The internet network based video replay system according to claim 19,
2 wherein said video programming is live programming of events that is stored for a
3 predetermined period of time to permit a user to time shift viewing of selective
4 programs upon demand.

1 21. The internet network based video replay system according to claim 19,
2 wherein said replay portal stores an individual program for at least one of a
3 predetermined period of time and an undetermined period of time for selective
4 viewing by a customer.

1 22. The internet network based video replay system according to claim 21,
2 wherein after a predetermined period of time the individual program is recorded over
3 to enable a customer to retrieve one of a revised selection of a plurality of programs.

1 23. The internet network based video replay system according to claim 19,
2 wherein a high capacity backbone is provided to permit the replay portal to receive
3 programs from live sources and from broadcasts for retransmission to customers.

1 24. The internet network based video replay system according to claim 19,
2 wherein a replay portal receives programs from other replay portals for retransmission
3 to customers.

1 25. The internet network based video replay system according to claim 19,
2 wherein said network includes a data sink for receiving network programs and live

3 programs from a provider, a storage unit for receiving said network programs and live
4 programs from the data sink and a data source for providing downstream viewing of
5 selected programming.

1 26. The internet network based video replay system according to claim 25, and
2 further including a storage manager unit for managing the selection of a particular
3 program by a customer and for addition and removal of data from a store.

1 27. The internet network based video replay system according to claim 26,
2 wherein said storage manager is operative connected to a data sink for receiving data
3 from upstream and writing the data to the store for a particular customer while making
4 the data available for immediate delivery to a customer.

1 28. The internet network based video replay system according to claim 25, and
2 further including a media manager for managing the selection of a particular program
3 by a customer, said media manager including a backend frame format means for
4 determining the encapsulation of media frames in a real time transport protocol.

1 29. The internet network based video replay system according to claim 19,
2 wherein the acquiring of the video program is by a unicast real time transport protocol
3 or by any other unicast protocol.

1 30. The internet network based video replay system according to claim 19,
2 wherein the acquiring of the video program is by a multicast real time transport
3 protocol or by any other multicast protocol.

1 31. The internet network based video replay system according to claim 19,
2 wherein the acquiring of the video program is by inter portal communication.

1 32. The internet network based video replay system according to claim 31,
2 wherein the transfer is by a unicast real time transport protocol or any other unicast
3 protocol.

1 33. The internet network based video replay system according to claim 31,
2 wherein the transfer is by a multicast real time transport protocol or any other
3 multicast protocol.

1 34. An internet network based video replay system adapted for enabling a
2 customer to view a video program comprising:

3 a network for providing a plurality of access programs selectively
4 available to enable a customer to view a selected program; and

5 a customer replay portal for storing a plurality of programs for enabling
6 a customer to selectively retrieve a selected program for viewing;

7 wherein the customer replay portal is maintained by said customer to
8 store a plurality of video programs for at least one of a predetermined period of
9 time and an undetermined period of time to permit the customer to view, still
10 pause, reverse and fast forward the viewing of selective programs upon
11 demand.

1 35. The internet network based video replay system according to claim 34,
2 wherein said video programming is live programming of events that is stored for a
3 predetermined period of time to permit a user to time shift viewing of selective
4 programs upon demand.

1 36. The internet network based video replay system according to claim 34,
2 wherein a high capacity backbone is provided to permit the customer replay portal to
3 receive programs directly from live sources and from broadcasts

1 37. The internet network based video replay system according to claim 34, and
2 further including a media manager for managing the selection of a particular program
3 by a customer, said media manager including a backend frame format means for
4 determining the encapsulation of media frames in a real time transport protocol.

1 38. The internet network based video replay system according to claim 34,
2 wherein the acquiring of the video program is by a unicast real time transport protocol
3 or any other unicast protocol.

1 39. The internet network based video replay system according to claim 34,
2 wherein the acquiring of the video program is by a multicast real time transport
3 protocol or any other multicast protocol.

1 40. The internet network based video replay system according to claim 34,
2 wherein the acquiring of the video program is by inter portal communication.

1 41. The internet network based video replay system according to claim 40,
2 wherein the acquiring of the video program is by transfer from a network based portal
3 operated by a service provider.

1 42. The internet network based video replay system according to claim 40,
2 wherein the acquiring of the video program is by transfer from a network based portal
3 operated by another customer.